

**Notice of Allowability**

Application No.

10/728,836

Examiner

Elmira Mehrmanesh

Applicant(s)

VAID ET AL.

Art Unit

2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/02/07.
2. ☒ The allowed claim(s) is/are 1-3,9,10 and 13-27.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **DETAILED ACTION**

This action is in response to an amendment filed on October 2, 2007 for the application of Vaid et al., for a "Poisoned error signaling for proactive OS recovery" filed December 8, 2003.

Claims 1, 14, 21, and 24 have been amended.

Claims 4-8, 11, and 12 have been cancelled.

Claims 1-3, 9-10, and 13-27 are allowed.

Claims 9-10, and 13-27 have been renumbered to 4-5, and 6-20 respectively.

### **Examiner's Amendment**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Marina Zalevsky on December 20, 2007. The application has been amended as follows:

As per claim 1, line 27, "shitting" is to be replaced by --shutting--.

### ***Reasons for allowance***

The following is an examiner's statement of reasons for allowance:

Applicant's arguments see pages 10-13, filed March 06, 2006, with respect to claims 1-17 have been fully considered and are persuasive. The previous 102(b) of claims 1-17 has been withdrawn.

In view of the Applicant's amendments regarding claims 1, 14, 21, and 24, after a complete search of all the relevant prior art the examiner has determined the claims are in condition for allowance. The following limitations when viewed in combination with the remainder of the claim as a whole place this application in condition for allowance.

As per claim 1, the examiner finds the novel and non obvious feature of claim 1, when read as whole to be marking the unit of data containing a data poisoning event with a software-visible bit error-control decoder which software-visible bit is a status bit to indicate to an operating system that the data unit contains the data poisoning event; determining, based on the pre-determined data poisoning policy, if the unit of data containing the poisoning event is to be acted upon; handing over the data units including the detected uncorrectable errors including data poisoning events from the error-control decoder to the operating system; based on the detected software-visible bit and the pre-determined data poisoning policy, acting, by the operating system of the computer system, to address the presence of the uncorrectable error in the unit of data.

As per claim 14, the examiner finds the novel and non obvious feature of claim 14, when read as whole to be a module to run on said processor to determine, based on the pre-determined data poisoning policy, if said uncorrectable error is a data poisoning event, and, if so, to mark unit of data containing said uncorrectable error and hand over the data units including the detected uncorrectable errors including data poisoning

events from the error-control decoder to an operating system which runs to-ran on said processor, the operating system to determine, based on the pre-determined data poisoning policy, if a particular data poisoning event is to be acted upon or not, the operating system adapted to detect the marked unit of data and to act to mitigate the detected uncorrectable error without always bringing down the operating system upon detection of the marked unit of data.

As per claim 21, the examiner finds the novel and non obvious feature of claim 21, when read as whole to be if an uncorrectable error is detected in the unit of data, based on the pre-determined data poisoning policy, determining if the detected uncorrectable error is a data poisoning event, and if so, marking the unit of data containing a data poisoning event with a software-visible bit by the error-control decoder; determining, based on the pre-determined data poisoning policy, if the unit of data containing poisoning event is to be acted upon, and if so, handing over the data units including the detected uncorrectable errors including data poisoning events from the error-control decoder to an operating system; detecting, by the operating system of the computer, the software-visible bit in the unit of data; and in accordance with the detected software-visible control bit and the pre-determined data poisoning policy, acting, by the operating system of the computer to address the presence of the uncorrectable error in the unit of data, wherein the operating system is not always brought down.

As per claim 24, the examiner finds the novel and non obvious feature of claim 24, when read as whole to be based on the pre-determined data poisoning policy,

determining if the detected uncorrectable error is a data poisoning event, and if so, marking the unit of data containing a data poisoning event with a software-visible bit by the error-control decoder; determining, based on the pre-determined data poisoning policy, if the unit of data containing poisoning event is to be acted upon, and if so, handing over the data units including the detected uncorrectable errors including data poisoning events from the error-control decoder to an operating system and detecting, by the operating system of the computer system, the software-visible bit in the unit of data; and in accordance with the detected software-visible control bit and the pre-determined data poisoning policy, acting, by the operating system to address the presence of the uncorrectable error in the unit of data, wherein the operating system is not always brought down.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elmira Mehrmanesh whose telephone number is (571) 272-5531. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W. Beausoliel can be reached on (571) 272-3645. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MICHAEL C. MASKULINSKI  
PRIMARY EXAMINER

A handwritten signature in black ink that reads "Michael Maskulinski". The signature is written in a cursive, flowing style.